



## Tetra Tech EM Inc.

Gwinnett Corporate Center ♦ 1750 Corporate Drive, Suite 735 ♦ Norcross, GA 30093 ♦ (770) 935-1542 ♦ FAX (770) 935-9049

ON Hold  
State #SRA site  
A.W. Yarbrough

April 6, 1999

Mr. Alan Yarbrough  
Remedial Project Manager  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, SW 11th Floor  
Atlanta, GA 30303

**Subject: Work Plan, Revision 0**  
**Georgia Power Company-Wansley Steam Plant Expanded Site Inspection**  
**U.S. EPA ID No. GAD000612937**  
**EPA Contract No. 68-W5-0021**  
**TDD No. 04-9903-0019**

Dear Mr. Yarbrough:

Tetra Tech EM Inc., Superfund Technical Assessment and Response Team (START), is submitting the work plan and attached worksheet for the Georgia Power Company-Wansley Steam Plant expanded site inspection. The proposed technical approach and cost estimate have been prepared in accordance with the U.S. Environmental Protection Agency (EPA) statement of work, dated December 15, 1995. The revised budget estimate for the ESI is 509 level of effort (LOE) hours at a total cost of \$23,307.00. An LOE calculation worksheet is enclosed to illustrate the breakout of ESI activities. This TDD amendment request is for the following:

Total LOE estimate	509 hours
LOE provided to date	- <u>40 hours</u>
LOE amendment request	469 hours

Cost amendment request	\$20,907
------------------------	----------

Please contact me at (770) 717-2342 if you have any questions or comments regarding this work plan.

Sincerely,

  
Alexis Ande  
START Project Manager

Enclosures

cc: Doug Thompson, EPA Project Officer  
Cindy Gurley, EPA Process Owner  
Anita Wender, EPA Contract Specialist  
Steve Pierce, START Program Manager  
Joseph Baer, START Site Assessment Coordinator  
START File



10721231

**EXPANDED SITE INSPECTION  
WORK PLAN**

**GEORGIA POWER COMPANY - WANSLEY STEAM ELECTRIC GENERATING PLANT  
ROOPVILLE, HEARD COUNTY, GEORGIA**

**U.S. EPA ID NO. GAD000612937**


**Revision 0**

**Prepared for**

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
Region 4  
Atlanta, GA 30303**

Contract No.	:	68-W5-0021
TDD No.	:	04-9903-0019
Date Prepared	:	April 6, 1999
EPA Remedial Project Manager	:	Alan Yarbrough
Telephone No.	:	(404) 562-8930
Prepared by	:	Tetra Tech EM Inc.
START Project Manager	:	Alexis Ande
Telephone	:	(770) 717-2342

Approved:

  
\_\_\_\_\_  
Joseph A. Baer  
START Site Assessment Coordinator

## CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION .....	1
1.1 BACKGROUND .....	1
1.2 STATEMENT OF WORK .....	2
1.3 CONFLICTS OF INTEREST .....	2
2.0 TECHNICAL APPROACH .....	2
2.1 TASKS .....	2
2.1.1 Task 1 - Prepare Work Plan and Cost Estimate .....	3
2.1.2 Task 2 - Conduct Site Background Research .....	3
2.1.3 Task 3 - Prepare Site-Specific Sampling Plan and Health and Safety Plan .....	4
2.1.4 Task 4 - Procure Subcontractor Support .....	4
2.1.5 Task 5 - Conduct Fieldwork .....	5
2.1.5.1 Conduct Site Reconnaissance .....	5
2.1.5.2 Conduct Sampling Visit .....	5
2.1.6 Task 6 - Prepare ESI Report .....	6
2.1.7 Task 7 - Provide Project Management .....	7
2.2 DELIVERABLES AND SCHEDULES .....	8
3.0 PERSONNEL .....	8
4.0 COST ESTIMATE .....	8
5.0 EXCEPTIONS TO THE ASSIGNMENT OR ANTICIPATED PROBLEMS .....	12
6.0 QUALITY ASSURANCE .....	12

## TABLES

<u>Table</u>	<u>Page</u>
TABLE 1 PROPOSED SCHEDULE OF DELIVERABLES .....	9
TABLE 2 TRAVEL COSTS .....	10
TABLE 3 OTHER DIRECT COSTS .....	11

## **1.0 INTRODUCTION**

Tetra Tech EM Inc., Superfund Technical Assessment and Response Team (START), received Technical Direction Document (TDD) No. 04-9903-0019 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W5-0021. Under this work assignment, START will assist EPA in conducting an expanded site inspection (ESI) at Georgia Power Company - Wansley Steam Electric Generating Plant, EPA ID No. GAD000612937, located in Roopville, Heard County, Georgia. This work plan outlines the technical approach, personnel, estimated cost, exceptions or anticipated problems, and quality assurance (QA) for activities under the work assignment.

### **1.1 BACKGROUND**

The Georgia Power Company-Wansley Steam Electric Generating Plant facility (Wansley Steam Plant) is located in a rural area of west Georgia east of Highway 27 off of Friendship Road in Roopville, Heard County, Georgia. The Plant is currently active and began operations in 1976. The plant has always been operated by Georgia Power; although, the plant is jointly owned by Georgia Power Company, Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia and the city of Dalton, Georgia. The plant property covers approximately 5,225 acres, the majority of which is located in Heard County; however, there are portions of the property which extend into Carroll County.

The primary objective of plant operations is generating electricity by boiling water in large tanks in order to produce steam that turns turbines that generate electricity. Coal and/or oil is used as fuel to boil the water. Waste fly ash and the majority of boiler cleaning waste (after neutralization) is pumped via pipeline into an unlined large lake known as the ash pond. Since 1980, all hazardous waste disposal practices at the facility have been in compliance with the Georgia Rules for Hazardous Waste Management. Water from this pond is released via a NPDES permitted unlined ditch into the Chattahoochee River.

## **1.2 STATEMENT OF WORK**

The project approach described in this work plan is based on activities outlined in EPA's ESI scope of work (SOW) dated December 15, 1995. The major components of the work assignment consist of a background review, preparation of a site-specific sampling plan (SSSP) and health and safety plan (HSP), fieldwork, preparation of the draft and final ESI reports, and data collection for the generation of a draft Hazard Ranking System (HRS) score for the Georgia Power Company-Wansley Steam Plant site.

## **1.3 CONFLICTS OF INTEREST**

START has screened the work described in this work plan for organizational conflicts of interest and has determined that, to the best of its knowledge, it has no actual, apparent, or potential organizational conflicts of interest with the work described in this work plan.

START is required to disclose to the EPA Contracting Officer any previous, current, or future relationship that might conflict with its job performance under this contract. To the best of START's knowledge, staff members assigned to this work assignment do not have any actual, apparent, or potential personal conflicts of interest. START and its subcontractors are aware of their obligation to identify and report any actual, apparent, or potential conflicts of interest that arise during the performance of this work assignment.

## **2.0 TECHNICAL APPROACH**

This section presents START's technical approach for the work assignment, allowing for modifications and additions, as needed. If the SOW changes as a result of an amended work assignment, START will revise the work plan to incorporate changes in the scope and cost.

## **2.1 TASKS**

The following subsections discuss tasks that START will perform to complete this work assignment.

### **2.1.1 Task 1 - Prepare Work Plan and Cost Estimate**

This work plan has been developed to outline activities to be conducted during the performance of an ESI at Georgia Power Company-Wansley Steam Plant and costs associated with the work assignment activities. The work plan lists the tasks to be performed, discusses the technical rationale and personnel requirements for this work assignment, and presents a schedule for completing each task. All efforts have been made to provide a cost-effective approach to supporting EPA in this work assignment. The work plan will be amended as necessary to incorporate unforeseen future activities or changes in the scope of the work assignment.

### **2.1.2 Task 2 - Conduct Site Background Research**

START will obtain background information from EPA sources, including files from the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) programs, the Georgia Department of Natural Resources Environmental Protection Division (EPD), and local sources (county health department, county clerk, chamber of commerce). START will review and copy all pertinent file materials necessary to complete ESI activities.

When reviewing federal, state, and local agency files, START will attempt to obtain the following types of information about the Georgia Power Company-Wansley Steam Plant site:

- Former and current land uses and owners/operators
- Activities conducted, products generated, and processes conducted on site
- Types and quantities of hazardous substances used and hazardous wastes generated on site
- Waste handling and disposal practices
- Status and types of permits for the facility
- Available analytical data and site assessment reports
- A representative sample of well logs and uses of groundwater within a 4-mile radius of the site
- Uses of surface water within 15 miles downstream of the site (with emphasis on drinking water and human food chain targets)

To facilitate collection of groundwater and surface water information, START will obtain topographic maps that cover a 4-mile radius around the site. These maps will show the 4-mile radius rings and the water bodies along the 15-mile downstream route.

Following review of available file information, START will complete the National Priorities List (NPL) Characteristics Data Collection Form. EPA uses this form to standardize hazardous waste site information. START will periodically update the form throughout the course of the ESI as additional information becomes available. The form will be submitted to EPA in draft and final form, along with the ESI report.

### **2.1.3 Task 3 - Prepare Site-Specific Sampling Plan and Health and Safety Plan**

START will prepare an SSSP at least 4 weeks before the ESI sampling visit, and will follow EPA guidelines stated in the SOW for preparing an SSSP. The SSSP will incorporate all findings from the field reconnaissance and will address monitoring well installations, field analyses, and other field investigation activities. START will submit copies of the draft SSSP to EPA, which will have a 10-day comment period to provide START with comments or to express concerns. START will address any comments and submit the final SSSP to EPA.

The SSSP will identify the major milestones and schedule for the sampling investigation, and will also identify ESI field personnel, documents to be generated during the site assignment, and deliverable dates. The SSSP will describe known or alleged waste characterizations and the sampling strategy. In addition to the SSSP, START will submit an health and safety plan for field activities, identifying potential hazards and level of personnel protection to be worn during site sampling activities.

### **2.1.4 Task 4 - Procure Subcontractor Support**

If well installation is required under the scope of the ESI, START will conduct a competitive bidding process to obtain a drilling subcontractor. START will also conduct a competitive bidding process to obtain contractors for conducting a site survey and for disposal of investigation-derived wastes (IDW). Subcontractor requests for quotations will be solicited after approval of the work plan.

### **2.1.5 Task 5 - Conduct Fieldwork**

START will perform the following fieldwork activities for the site assignment:

- Conduct a site reconnaissance
- Interview site representatives
- Conduct a sampling investigation
- Dispose of IDW
- Evaluate all sampling data
- Collect HRS target data

#### **2.1.5.1 Conduct Site Reconnaissance**

An on-site reconnaissance will be conducted as part of the field sampling effort. The primary objectives of the site reconnaissance are to document current site conditions, determine health and safety requirements, familiarize the sampling team with the site, and modify any sampling locations. START will conduct the site reconnaissance in accordance with applicable EPA guidelines.

#### **2.1.5.2 Conduct Sampling Visit**

START will conduct a sampling visit at the Georgia Power Company-Wansley Steam Plant site after the EPA Task Monitor has approved the SSSP. Sampling will be conducted as prescribed in the SSSP. START will identify sampling locations in a field logbook, providing the distance and direction from a fixed object.

The sample types to be collected may include the following:

- Rinsate blank samples (for each method)
- One duplicate sample for each set of 20 samples
- One blank for each day of fieldwork
- A background sample for each sample matrix
- Environmental samples

Collection of environmental samples will focus on the evaluation of migration and exposure pathways of concern (groundwater, surface water, soil, and air pathways). In addition to collecting



environmental samples for Contract Laboratory Program (CLP) analysis, START may implement field analytical screening activities (field GC/MS or portable X-ray fluorescence), install monitoring wells, and employ geophysical investigation methods as described in the SSSP.

Samples will be collected, handled, and stored in accordance with procedures outlined in the SSSP, the site-specific HSP, and applicable portions of EPA's *Environmental Investigations Standard Operating Procedures Quality Assurance Manual* (May 1996). The site owner/operator will be responsible for handling and storing requested portions of samples. Following completion of fieldwork for the site, START will pack and ship samples in accordance with the *User's Guide for the CLP* (March 1989).

While performing on-site sampling activities, START will adhere to guidelines and requirements specified in the *HRS Final Rule*, published on December 14, 1990, in the Code of Federal Regulations. START will also follow sampling guidelines presented in the SOW when planning and conducting ESI sampling activities.

#### **2.1.6 Task 6 - Prepare ESI Report**

START will prepare a draft ESI report in accordance with the ESI report outline and specifications in the SOW. This report will focus on documenting whether hazardous substances have been, may have been, or are being released into the environment, as well as potential and/or documented receptors (human and environmental) of that release.

Specific contents of the draft ESI report include the following:

- Analytical data summary tables comparing hazardous constituents detected in media samples to those detected in the background and control samples. The data tables will highlight any compound or element that was detected at greater than three times the background sample concentration.
- Draft figures prepared in accordance with guidelines presented in the SOW
- A draft HRS score based on available and sufficient documentation

Based on the results of the ESI, START may recommend any of the following courses of action:

- Defer the site to the RCRA section or the Nuclear Regulatory Commission (if a licensed NRC facility) for further consideration
- Issue a no further remedial action planned at this time under CERCLA
- Score the site at this time

Draft ESI reports will be sent to the EPA Task Monitor, who has a 30-day comment period. START will revise the report and submit copies of the final ESI report to EPA within 4 weeks of receiving comments on the draft report. A transmittal letter will accompany the final report and will indicate modifications based on EPA comments.

After EPA accepts the final ESI report, START will prepare and submit all closeout forms and check the ESI files to make certain that all documents generated during the performance period of the ESI assignment are assembled. Upon request, all documents generated under the work assignment will be inventoried and submitted to EPA or to an EPA-designated location within 3 weeks of either the submittal of the final ESI report or the cancellation of a site assignment.

START will maintain a handwritten docket log of each piece of file information in accordance with the file structure discussed in the SOW. Upon request, the entire file for the site will be delivered to EPA. In addition, START will provide computer disks of all documents generated under the work assignment.

All documents generated for the work assignment are the property of EPA and will be retained as part of EPA files.

#### **2.1.7 Task 7 - Provide Project Management**

START will perform the following project management activities:

- Communicate work progress to the EPA Task Monitor
- Coordinate activities with project team members
- Obtain corporate and individual conflict-of-interest clearances
- Manage confidential business information, as appropriate
- Prepare project staffing, scheduling, and cost information
- Prepare a monthly status report summarizing work accomplished during each monthly reporting period

The monthly status reports will include the following:

- Progress achieved
- Deliverables submitted
- Outstanding issues and resolutions
- Subcontracting information
- Total budget expenditures and variances
- Activities projected for the next reporting period
- Notification when 75 percent of the level of effort (LOE) hours or funding for this work assignment has been expended

## **2.2 DELIVERABLES AND SCHEDULES**

Table 1 lists the dates by which START anticipates submitting to EPA the deliverables under this work assignment.

## **3.0 PERSONNEL**

The proposed START project manager for all tasks under this work assignment is Ms. Alexis Ande. Additional staff will be assigned as needed to complete each task under this work assignment. Resumes of START staff to be assigned specific technical tasks under this work assignment will be made available upon request.

## **4.0 COST ESTIMATE**

START's cost estimate for LOE hours and dollars is based on the SOW and discussions with the EPA Task Monitor. The initial estimate for the ESI is 509 LOE hours at an average rate of \$45.79 per LOE hour, which includes travel costs (see Table 2) and other direct costs (see Table 3). START has apportioned the LOE hours as listed below:

<u>Professional Level</u>	<u>Level of Effort Hours</u>
P4	20
P3	113
P2	225
P1	<u>151</u>
Total LOE Hours	509
Total Cost	\$23,307

**TABLE 1**  
**PROPOSED SCHEDULE OF DELIVERABLES**

<b>TASK</b>	<b>DELIVERABLE</b>	<b>DELIVERABLE DUE DATE</b>
1	Work Plan/Cost Estimate	30 Days After TDD Issued
3	Site-Specific Sampling Plan	4 Weeks Prior to Fieldwork
3	Health and Safety Plan	2 Weeks Prior to Fieldwork
6	Draft ESI Report	60 Days After Receipt of Sample Analysis
6	Final ESI Report	4 Weeks After Receipt of EPA Comments
6	Project Document File	3 Weeks After Delivery of Final ESI Report
7	Monthly Status Reports	20 Days After Each Month-end Closing Date

Notes:

TDD - Technical Direction Document  
ESI - Expanded site inspection

**TABLE 2**  
**TRAVEL COSTS**

<b>\$ PER DAY/NIGHT</b>	<b>NUMBER OF DAYS/NIGHTS</b>	<b>NUMBER OF PEOPLE</b>	<b>TOTAL (\$)</b>
<b>Hotel Accommodations</b> Carrollton, Georgia			
\$50.00	4	5	\$1,000.00
<b>Per Diem</b> Carrollton, Georgia			
\$30.00	3.5	5	\$600.00
			Total \$1,600.00

**TABLE 3**  
**OTHER DIRECT COSTS**

CATEGORY	TOTAL COST
Reproduction and Reference Materials (such as topographic maps, property maps, population information)	\$500.00
Ground Transportation	\$300.00
Freight (Federal Express shipment of samples, interoffice shipment of project materials)	\$750.00
Telephone and Facsimile	\$150.00
Equipment and Expendable Field Supplies	\$600.00
Total ODCs: \$2,300.00	

Note:

ODC - Other direct cost

The size and complexity of some activities involved in tasks under this work assignment indicate that an adjustment in LOE hours and costs may be necessary. START will notify the EPA Task Monitor immediately of any anticipated adjustment in LOE hours.

#### **5.0 EXCEPTIONS TO THE ASSIGNMENT OR ANTICIPATED PROBLEMS**

This work plan is an initial estimate of the required LOE hours and costs for tasks to be performed and is based on the EPA SOW dated December 15, 1995. At the request of EPA, START will provide additional support and amend this work plan, if necessary. An amended EPA SOW may also be required. If Tasks 1 through 7 require effort beyond that described in this work plan, modifications to the budget for this work assignment will be needed. If any special requirements significantly alter the LOE hours, budget, or schedule described in this work plan, START will so notify EPA. During the work assignment, START will notify the EPA Task Monitor immediately by telephone of any problem that may impede performance of work and of any corrective action needed to resolve the problem.

#### **6.0 QUALITY ASSURANCE**

All activities and deliverables under that work assignment are subject to a QA program or system audit required under the contract to be carried out by the QA officer or a designee. Audit results and any corrective actions required will be specified in the monthly status reports.

**SITE INSPECTION/EXPANDED SITE INSPECTION  
PRELIMINARY LEVEL-OF-EFFORT CALCULATION WORKSHEET  
GEORGIA POWER COMPANY-WANSLEY STEAM PLANT**

ACTIVITY	SI <sup>a</sup> /Low LOE ESI ESTIMATE	
	LOE Range	Projected LOE
<b>TASK 1 - Prepare Work Plan and Cost Estimate</b>		
Work Plan and Conduct Conflict of Interest Search	8	8
EPA File Copying	4 - 8 <sup>b</sup>	4
Scoping Meeting	(6*)	4
Preliminary Cost Estimate	6	6
<i>Subtotal:</i>		22
<b>TASK 2 - Conduct Background Research</b>		
State File Copying (includes travel)	(12 - 24* <sup>b</sup> )	--
File Review and Identification of Data Gaps	12 - 24 <sup>b</sup>	12
<i>Subtotal:</i>		12
<b>TASK 3 - Prepare Site-Specific Sampling Plan and Health and Safety Plan</b>		
Sampling Strategy, Site Maps, and Sample Location Maps	16 - 24 <sup>c</sup>	16
Draft Site-Specific Sampling Plan	32 - 40 <sup>c</sup>	32
Final Site-Specific Sampling Plan	8 - 12	8
Health and Safety Plan	6 - 8	6
<i>Subtotal:</i>		62
<b>TASK 4 - Procure Subcontractor Support</b>		
Sample/Well Survey	(Site-specific*)	--
Investigation-Derived Waste Removal	(Site-specific*)	--
<i>Subtotal:</i>		0
<b>TASK 5 - Conduct Field Work</b>		
Site Access/Property Information (no travel)	4 - 8 <sup>c</sup>	4
Equipment List and Loadout	8 - 12 <sup>c</sup>	8
Site Reconnaissance (includes travel: 2 persons/ 1.5 to 2 8-hour days)	(24 - 32*)	--



ACTIVITY	SI <sup>a</sup> /Low LOE ESI ESTIMATE		
	LOE Range	Projected LOE	
Pre-mobilization Meeting (1 hour/person)		4 - 6 <sup>c</sup>	5
Sampling Activities (includes travel: 5 persons/4days/ 10 hours/day)		120 - 250 + <sup>c</sup>	200
CLP Paperwork (pre- and post-field work)		12 - 24 <sup>c</sup>	12
Equipment Decontamination		10 - 20 <sup>c</sup>	12
		<i>Subtotal:</i>	241
<b>TASK 6 - Prepare SI/ESI Report</b>			
Draft Report and SI Scoresheets		140 (< 30 Samples) 200 (30 - < 60 samples) 280 (60 - < 100 samples)	140
Final Report		10 - 16 <sup>c</sup>	12
		<i>Subtotal:</i>	152
<b>TASK 7 - Provide Project Management</b>			
Communications, Reporting, Tracking		12 - 16 <sup>c</sup>	12
Project Closeout		8	8
		<i>Subtotal:</i>	20
		<b>Total LOE Estimate:</b>	509

Notes:

- SI - Site inspection
- ESI - Expanded site inspection
- (\*) - May not apply to all sites
- <sup>a</sup> - Field and reporting budgets will be adjusted for small-scale site inspections (10 - 12 samples)
- <sup>b</sup> - Contingent on size of site files
- <sup>c</sup> - Contingent on the number of samples collected/size of investigation